Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An eye image pickup device comprising:

an eye image pickup unit for capturing an eye image;

a display image formation unit for forming a display image from the eye image by degrading an at least iris-containing area in the eye image with a condition of retaining a shape of the iris-containing area and a shape of a pupil in the iris-containing area; and

a display unit for displaying the display image formed by the display image formation unit.

2. (Original) An authentication device comprising:

the eye image pickup device according to claim 1;

an authentication information formation unit for forming authentication information from the eye image of a user to be authenticated entered from the eye image pickup unit; and

an authentication unit for authenticating the user by comparing and collating the authentication information with registered authentication information which has been registered previously.

3. (Original) The authentication device according to claim 2, wherein

the display image formation unit forms a display image used for guiding the user about an eye position; and

the authentication information formation unit forms the authentication information from the eye image of the user, the eye image being guided to one of a specified position and a specified region by the display image on the display unit.

4. (Original) The authentication device according to claim 2 further comprising:

an authentication information registration unit for registering, as registered authentication information, the authentication information formed from the eye image of the user, wherein

the display image formation unit forms a display image for determining whether the eye image of the user should be registered or not; and

the authentication information registration unit registers the authentication information as the registered authentication information after the display image formed by the display image formation unit is displayed on the display unit.

5. (Original) The authentication device according to claim 2, wherein

the display image formation unit forms the display image by selectively applying an image process to the at least iris-containing area in the eye image.

6. (Original) The authentication device according to claim 5, wherein

the authentication information formation unit comprises: an eye position detection unit for detecting an eye position from the eye image; and an eyelid position detection unit for detecting an eyelid position from the eye image; and

the display image formation unit determines the at least iris-containing area in the eye image from the eye position and the eyelid position, and selectively performs the image process.

7. (Original) The authentication device according to claim 2, wherein

the display image formation unit forms a display image by subjecting the eye image to compression.

8. (Original) The authentication device according to claim 5, wherein

the display image formation unit forms a display image by subjecting the eye image to compression.

9. (Original) The authentication device according to claim 7, wherein

the compression is JPEG compression.

10. (Original) The authentication device according to claim 8, wherein

the compression is JPEG compression.

11. (Previously Presented) The authentication device according to claim 2, wherein

the display image formation unit forms a display image by reducing a number of pixels composing the eye image.

12. (Previously Presented) The authentication device according to claim 5, wherein

the display image formation unit forms a display image by reducing a number of pixels composing the eye image.

13. (Original) The authentication device according to claim 2, wherein

the display image formation unit forms a display image by adding specified noise to the eye image.

14. (Original) The authentication device according to claim 5, wherein

the display image formation unit forms a display image by adding specified noise to the eye image.

15. (Previously Presented) The authentication device according to claim 2, wherein

the display image formation unit forms a display image by subjecting the eye image to at least two image processes out of reducing a number of pixels composing the eye image, compressing the eye image, and adding specified noise to the eye image.

16. (Previously Presented) The authentication device according to claim 5, wherein

the display image formation unit forms a display image by subjecting the eye image to at least two image processes out of reducing a number of pixels composing the eye image, compressing the eye image, and adding specified noise to the eye image.

17. (Original) The authentication device according to claim 5, wherein

the display image formation unit forms a display image by replacing the at least iris-containing area in the eye image with a specified image.

18. (Original) The authentication device according to claim 2 further comprising:

an image quality determination unit for determining whether an eye image captured by the eye image pickup unit is adequate in quality or not, wherein

the authentication information formation unit forms the authentication information of an eye image which has been determined to be adequate in quality by the image quality determination unit.

19. (Currently Amended) An authentication device comprising:

an eye image pickup unit for capturing an eye image of a user to be authenticated;

an authentication information formation unit for forming authentication information of the eye image of the user;

an authentication information registration unit for registering the authentication information as registered authentication information;

authentication unit for authenticating the user by comparing and collating the authentication information with registered authentication information which has been registered previously;

display image formation unit for forming a display image by degrading an at least iris-containing area in the eye image with a condition of retaining a shape of the iris-containing area and a shape of a pupil in the iris-containing area; and

a display unit for displaying the display image, wherein

the display image formation unit forms the display image and makes the display unit display the display image at least one of when the user is guided and when the authentication information registration unit registers the authentication information as the registered authentication information.

20. (Currently Amended) An image processing method comprising:

a first step of cutting out an at least iris-containing area from an eye image; and

a second step of selectively degrading an image of the iris-containing area cut out in the first step with a condition of retaining a shape of the iris-containing area and a shape of a pupil in the iris-containing area.

21. (Currently Amended) A computer readable medium executable by a computer for executing the steps of:

a first step of cutting out an at least iris-containing area from an eye image; and

a second step of selectively degrading an image of the iris-containing area cut out in the first step with a condition of retaining a shape of the iris-containing area and a shape of a pupil in the iris-containing area.

22. (Previously Presented) The eye image pickup device according to claim 1 further comprising:

an eye position detection unit for detecting an iris-pupil area from the eye image; and

an eyelid position detection unit for detecting an eyelid area from the eye image,

wherein the display image formation unit determines the iris-containing area by subtracting the eyelid area detected by the eyelid position detection unit from the eye image captured by image pickup unit and calculating an area which overlaps with the iris-pupil area detected by the eye position detection unit.

23. (Previously Presented) The authentication device according to claim 19 further comprising:

an eye position detection unit for detecting an iris-pupil area from the eye image; and

an eyelid position detection unit for detecting an eyelid area from the eye image,

wherein the display image formation unit determines the iris-containing area by subtracting the eyelid area detected by the eyelid position detection unit from the eye image captured by image pickup unit and calculating an area which overlaps with the iris-pupil area detected by the eye position detection unit.

24. (Previously Presented) The image processing method according to claim 20 further comprising:

a third step of detecting an iris-pupil area from the eye image; and

a fourth step of detecting an eyelid area from the eye image,

wherein the iris-containing area is determined by subtracting the detected eyelid area from the eye image and calculating an area which overlaps with the detected iris-pupil area.

25. (Previously Presented) The computer readable medium according to claim 21 further executing the steps of:

a third step of detecting an iris-pupil area from the eye image; and

a fourth step of detecting an eyelid area from the eye image,

wherein the iris-containing area is determined by subtracting the detected eyelid area from the eye image and calculating an area which overlaps with the detected iris-pupil area.